

Release notes for ENDF/B Development e-043\_Tc\_000  
evaluation

**ENDF**  
**B-VII**.dev

October 13, 2016

- fudge-4.0 Warnings:

1. Mislabelled emitted particle  
*Reading ENDF file: ../e-043\_Tc\_000.endf (Error # 0): ZAP messed up*  
  
WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0
2. FIXME: Generic fudge unimplemented message  
*reaction label 1: e- + Tc + gamma [bremsstrahlung] / Product: e- (Error # 0): Generic unimp (c)*  
  
WARNING: Checking not yet implemented for energyLoss type data
3. FIXME: Generic fudge unimplemented message  
*reaction label 2: e- + Tc [excitation] / Product: e- (Error # 0): Generic unimp (c)*  
  
WARNING: Checking not yet implemented for energyLoss type data

- fudge-4.0 Errors:

1. Calculated and tabulated thresholds don't agree  
*reaction label 0: e- + Tc [large angle Coulomb scattering] / Cross section: (Error # 0): Threshold mismatch*  
  
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!
2. Calculated and tabulated thresholds don't agree  
*reaction label 1: e- + Tc + gamma [bremsstrahlung] / Cross section: (Error # 0): Threshold mismatch*  
  
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!
3. Calculated and tabulated thresholds don't agree  
*reaction label 2: e- + Tc [excitation] / Cross section: (Error # 0): Threshold mismatch*  
  
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!
4. Calculated and tabulated thresholds don't agree  
*reaction label 3: e- + e- + Tc1s1/2 / Cross section: (Error # 0): Threshold mismatch*  
  
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 21012. eV!
5. Calculated and tabulated thresholds don't agree  
*reaction label 4: e- + e- + Tc2s1/2 / Cross section: (Error # 0): Threshold mismatch*  
  
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 3022.4 eV!
6. Calculated and tabulated thresholds don't agree  
*reaction label 5: e- + e- + Tc2p1/2 / Cross section: (Error # 0): Threshold mismatch*  
  
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 2797.9 eV!
7. Calculated and tabulated thresholds don't agree  
*reaction label 6: e- + e- + Tc2p3/2 / Cross section: (Error # 0): Threshold mismatch*

- WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 2677.6 eV!
8. Calculated and tabulated thresholds don't agree  
*reaction label 7:  $e^- + e^- + Tc3s1/2$  / Cross section: (Error # 0): Threshold mismatch*

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 533.42 eV!

  9. Calculated and tabulated thresholds don't agree  
*reaction label 8:  $e^- + e^- + Tc3p1/2$  / Cross section: (Error # 0): Threshold mismatch*

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 445.24 eV!

  10. Calculated and tabulated thresholds don't agree  
*reaction label 9:  $e^- + e^- + Tc3p3/2$  / Cross section: (Error # 0): Threshold mismatch*

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 424.95 eV!

  11. Calculated and tabulated thresholds don't agree  
*reaction label 10:  $e^- + e^- + Tc3d3/2$  / Cross section: (Error # 0): Threshold mismatch*

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 267.01 eV!

  12. Calculated and tabulated thresholds don't agree  
*reaction label 11:  $e^- + e^- + Tc3d5/2$  / Cross section: (Error # 0): Threshold mismatch*

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 263.07 eV!

  13. Calculated and tabulated thresholds don't agree  
*reaction label 12:  $e^- + e^- + Tc4s1/2$  / Cross section: (Error # 0): Threshold mismatch*

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 75.84999999999999 eV!

  14. Calculated and tabulated thresholds don't agree  
*reaction label 13:  $e^- + e^- + Tc4p1/2$  / Cross section: (Error # 0): Threshold mismatch*

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 49.6 eV!

  15. Calculated and tabulated thresholds don't agree  
*reaction label 14:  $e^- + e^- + Tc4p3/2$  / Cross section: (Error # 0): Threshold mismatch*

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 46.55 eV!

  16. Calculated and tabulated thresholds don't agree  
*reaction label 15:  $e^- + e^- + Tc4d3/2$  / Cross section: (Error # 0): Threshold mismatch*

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 8.07 eV!

  17. Calculated and tabulated thresholds don't agree  
*reaction label 16:  $e^- + e^- + Tc4d5/2$  / Cross section: (Error # 0): Threshold mismatch*

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 7.78 eV!

  18. Calculated and tabulated thresholds don't agree  
*reaction label 17:  $e^- + e^- + Tc5s1/2$  / Cross section: (Error # 0): Threshold mismatch*

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 6.19 eV!

- `xsectplotter` Warnings:

1. Mislabelled emitted particle  
*Error: ZAP messed up*

```
stderr while processing crossSection
```

```
WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0  
... [2 more lines]
```